REPORT

ON THE

SANITARY CONDITION

OF THE

BOROUGH OF CAMBRIDGE,

From January 1st to December 31st, 1919,

BY

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Annual Report of the Medical Officer of Health 1919.

INTRODUCTORY.

The Annual Reports which are now presented are much fuller than their immediate predecessors but fall short in many respects of the requirements of the Ministry of Health as detailed in the Official Memorandum on Annual Reports. It is desired by the Ministry that Annual Reports should provide information under such headings as :—

1. Natural and social conditions.
2. Sanitary circumstances including water, drainage and sewerage, closet accommodation, scavenging, sanitary inspection, premises and occupations controlled by bye-laws or regulations, schools etc.
3. Food—including Milk Supply, other foods, Sale of Food and Drugs Acts.
4. Prevalence and control of infectious diseases.
5. Maternity and Child Welfare.
6. Sanitary Administration—including staff employed, hospital accommodation for infectious diseases, bacteriological work, etc.
7. Housing. This portion of the report is to be comprised in a separate volume unless it is too short to render this worth while.

Some of the matters mentioned will involve the repetition year by year of information which will generally be already in the possession of members of the Council, while portions of the Report will deal with matters, e g. scavenging, sewage disposal, water supply, etc., over which the Health Committee has no direct control.

In the present reports all matters of immediate interest are dealt with as fully as appears to be necessary at the moment. It is evident however that in future reports those matters which have been omitted during the past four or five years must receive notice even at the expense of repetitions and increased size of the volume.

POPULATION.

Census population (1911), 55,812.

Estimated Population : The estimates of population used in this report are those of the Registrar General, and for statistical purposes

two estimates are given, (1) the "death-rate population," 57,849; and (2) the "birth-rate population," 60,261.

The former excludes all non-civilian males, whether serving at home or abroad, and is based mainly upon the rationing returns supplied by the Ministry of Food.

The latter includes all the elements of the population contributing to the birth and marriage rates, both civilian and non-civilian enlisted from this country, whether serving at home or abroad.

MARRIAGES.

The increased marriage rate is of importance, and at the same time is a factor contributing to the housing difficulty. It would no doubt have been higher had it been possible for young marriageable people to secure suitable houses.

		Rate per 1000 of the population.	
		Cambridge.	England & Wales.
1913	302	14·9	15·5
1914	384	13·4	15·9
1915	527	18·4	19·3
1916	360	12·6	15·4
1917	361	12·3	13·8
1918	414	14·2	15·3
1919	497	16·4	19·7

BIRTHS.

The number of births registered as belonging to Cambridge during the years 1913—1919 was as follows:—

	Males	Females	Birth Rate	No. of Males born per 100 Females
1913	552	557	19·4	99·1
1914	485	511	17·4	94·9
1915	491	506	17·4	97·0
1916	514	477	17·4	107·7
1917	378	363	12·6	104·1
1918	422	399	14·1	105·7
1919	463	431	14·8	107·4

The number of illegitimate births registered was 77 or 8·6 per cent. of the total number of births, as compared with 93 (7·6 per cent.) in 1918; 57 (7·7 per cent.) in 1917, and 72 (7·2 per cent.) in 1916.

Notification of Births.—Although the proportion of births notified is high, the statutory obligation to notify a birth to the Medical Officer of Health within 36 hours does not yet appear to be fully known. The number registered and notified from various sources from 1913 is as follows :—

	1913	1914	1915	1916	1917	1918	1919
Total Births registered	1109	996	997	986	741	821	894
Births notified ...	965	921	909	928	701	762	876
Percentage notified ...	87·0	92·4	91·1	94·1	94·6	92·8	97·9
Notified by Doctors ...	280	240	209	188	165	160	179
Notified by Midwives	436	454	443	450	383	456	501
Notified by Parents ...	249	227	257	280	153	146	196

Twenty-nine still-births were notified, being 3·2 per cent. of the number registered. The rate in 1918 was 2·8 ; in 1917, 2·7 ; and in 1916, 3·4 per cent.

The natural increase of the population, *i.e.* the excess of births over deaths from 1913 has been as follows :—

	Total Births.	Total Deaths.	Natural Increase.
1913	1109	680	429
1914	996	728	268
1915	997	888	109
1916	991	683	208
1917	741	634	107
1918	821	770	91
1919	894	646	248

DEATHS.

The number of deaths of Cambridge people (civilians only) occurring in Cambridge and elsewhere during 1919 was 646 and the **death-rate per 1,000 was 11·1**. The rates in previous years were :—1913, 11·9 ; 1914, 12·7 ; 1915, 16·4 ; 1916, 12·5 ; 1917, 12·1 ; 1918, 14·8.

The death-rate in 1919 for England and Wales was 13·8. In the 96 "Great Towns" (including London) it was 13·8 ; in London 13·4 ; and in the 148 Smaller Towns 12·6.

The deaths were distributed as follows :—

	St Andrew the Less.	St Andrew the Great.	Chesterton.	Cambridge Without.	Total
First Quarter ...	142	35	58	14	249
Second " ...	78	20	21	12	131
Third " ...	80	14	28	9	131
Fourth " ...	68	28	29	10	135
	368	97	136	45	646

MINISTRY OF HEALTH.

TABLE I.

Vital Statistics of Whole District during 1919 and previous Years.

Year.	Population estimated to Middle of each year.	Births.			Total Deaths registered in the District.		Transferable Deaths.‡		Nett Deaths belonging to the District.			
		Uncorrected Number	Nett.						Under one year of age.		At all ages	
			Number.	Rate.	*Number.	Rate.	of Non-residents registered in the District	of Residents not registered in the district.	*Number.	Rate per 1,000 nett Births.	*Number.	Rate.
1	2	3	4	5	6	7	8	9	10	11	12	13
1914 ...	57159	984	996	17·4	780	13·6	89	37	78	78	728	12·7
1915 ...	54029	996	997	17·4	955	17·6	122	55	88	88	888	16·4
1916 ...	52236	986	991	17·4	753	13·9	104	31	72	72	680	12·5
1917 ...	†52282 ‖58280	741	741	12·6	725	13·8	124	33	53	71	634	12·1
1918 ...	†51981 ‖58243	821	821	14·1	822	15·7	110	58	54	65	770	14·8
1919 ...	†57849 ‖60261	897	894	14·8	740	12·7	130	36	44	49	646	11·1

NOTES.—This Table is arranged to show the gross births and deaths in the district, and the births and deaths properly belonging to it with the corresponding rates.

† Population for calculating Death rate.

‖ ,, ,, ,, Birth ,,

* In Column 6 are included the whole of the deaths registered during the year as having actually occurred within the district.

In Column 12 are entered the number in Column 6, corrected by subtraction of the number in Column 8 and by addition of the number in Column 9. Deaths in Column 10 are similarly corrected by subtraction of the deaths under 1, included in the number given in Column 8, and by addition of the deaths under 1 included in the number given in Column 9.

‡ "Transferable Deaths" are deaths of persons who, having a fixed or usual residence in England or Wales, die in a district other than that in which they resided.

Area of District in acres (land and inland water) 5,457

Total population at all ages 55,812
Number of inhabited houses 13,150
Average number of persons per house..... 4·2
} At Census of 1911.

MINISTRY OF HEALTH.

TABLE III.

Causes of and ages at Death during the Year 1919. See Notes on next page.

Causes of Death.	Nett Deaths at the subjoined Ages of "Residents" whether occurring within or without the District (*a*).									Deaths in or belonging to localities (at all ages).				Total Deaths whether of "Residents" or "non-Residents" in Institutions in the District (*b*).
	All ages.	Under 1.	1 and under 2.	2 and under 5.	5 and under 15.	15 and under 25.	25 and under 45.	45 and under 65.	65 and upwards.	St. Andrew the Less.	St. Andrew the Great.	Chesterton.	Cambridge without.	
1	2	3	4	5	6	7	8	9	10					11
All causes { Certified (*c*) ...	645	44	9	14	20	30	70	157	301	368	97	134	46	223
All causes { Uncertified ...	1	...	...	...	...	...	...	...	1	...	...	1	...	...
Enteric Fever	...	...	...	...	..	...	...	...	...	...	...	...	...	...
Small-pox	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Measles	3	2	...	...	1	...	...	...	..	2	1	...	...	1
Scarlet Fever	2	...	...	...	2	...	...	...	...	...	1	...	1	3
Whooping Cough	1	...	...	1	...	...	...	...	...	1	...	...	...	...
Diphtheria and Croup ...	8	1	...	1	6	...	...	...	...	6	...	2	...	6
Influenza	33	...	...	1	2	5	11	6	8	16	7	7	3	2
Erysipelas	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Phthisis (Pulmonary Tuberculosis)	35	...	...	...	1	6	19	9	...	25	3	7	...	2
Tuberculous Meningitis ...	9	...	1	3	3	2	...	...	...	3	1	4	1	4
Other tuberculous diseases...	8	1	2	1	...	1	2	1	...	6	1	1	...	7
Cancer, malignant disease ...	79	...	...	...	...	1	5	42	31	43	15	15	6	31
Rheumatic Fever	4	...	...	...	...	2	...	...	2	1	...	3	...	2
Meningitis (*d*)	1	1	...	...	...	...	...	...	...	...	1	...	...	4
Organic Heart Disease ...	71	...	...	...	...	...	8	21	42	37	13	17	4	15
Bronchitis	64	6	...	...	...	...	1	7	50	38	12	11	3	8
Pneumonia (all forms) ...	34	4	3	5	1	1	5	5	10	17	5	11	1	5
Other diseases of Respiratory organs	6	...	...	...	...	...	2	1	3	3	...	3	...	1
Diarrhœa and Enteritis (*e*)...	6	4	2	...	..	...	...	...	...	2	1	1	2	...
Appendicitis and Typhlitis.	1	...	...	...	...	...	1	...		...	...	1	...	4
Cirrhosis of Liver	3	...	...	...	...	...	...	2	1	...	1	2	...	...
Alcoholism	2	...	...	...	...	...	...	1	1	1	1	...	...	...
Nephritis and Bright's Disease	30	...	...	1	1	1	7	7	13	21	2	4	3	8
Puerperal Fever	2	...	...	...	...	...	2	...	...	...	1	1	...	...
Other Accidents and Diseases of Pregnancy and Parturition	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Congenital Debility and Malformation, including Premature Birth	18	18	...	...	...	...	...	...	...	15	2	1	...	6
Violent Deaths, excluding Suicide	20	...	1	1	1	6	1	7	3	9	5	3	3	21
Suicide	11	...	...	...	...	1	1	9	...	4	2	4	1	1
Other Defined Diseases ...	192	7	...	...	2	4	5	37	137	116	22	37	17	92
Diseases ill-defined or unknown	3	...	...	..	...	...	...	2	1	2	...	...	1	...
	646	44	9	14	20	30	70	157	302	368	97	135	46	223
Sub-Entries included in above figures. Cerebro-spinal Meningitis ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Poliomyelitis ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Lobar Pneumonia..	1	...	...	...	...	1	...	...	...	...	1	...	...	...
Pneumonia ...	16	1	...	1	1	...	5	3	5	11	1	4	...	1
Pleurisy	...	...	...	...	...	...	...	...	...	...	...	...	...	...

NOTES TO TABLE.

The classification and numbering of Causes of Death are those of the "Short List" on page XXV. of the Manual of the International List of Causes of Death, which has been consulted and followed in all cases of doubt.

(*a*) All "Transferable Deaths" of residents, *i.e.*, of persons resident in the District who have died outside it, are *included* with the other deaths in columns 2-10. Transferable deaths of non-residents., *i.e.*, of persons resident in England and Wales who have died in the District, are in like manner *excluded* from these columns. For the precise meaning of the term "transferable" deaths *see* footnote to Table I.

(*b*) All deaths occurring in Institutions for the sick and infirm situated within the district, whether of residents or non-residents, are entered in the last column of Table III.

(*c*) All deaths certified by registered Medical Practitioners and all Inquest cases are classed as "Certified"; all other deaths are regarded as "Uncertified."

(*d*) Exclusive of "Tuberculous Meningitis" (10), but inclusive of Cerebro-Spinal Meningitis.

(*e*) Title 19 has been used for deaths from Diarrhœa and Enteritis at all ages. (In the "Short List" deaths from Diarrhœa and Enteritis under 2 years are included under Title 19; those at 2 years and over being placed under Title 28.)

N.B.—Deaths of soldiers and sailors occurring in hospitals and institutions in the district are excluded from the total number of deaths registered in the district, and such deaths are excluded from column 11 of Table III.

Deaths in Public Institutions.—The proportion of deaths in public institutions in Cambridge reached its maximum in 1909 when it was 32·1 per cent. Since then it fell steadily to 21·8 per cent. in 1915 and in 1916 was 17·7, in 1917 23·5, in 1918 17·6, and in 1919, 20·3 per cent. The proportions for the Country as a whole have been 1907—16, 21·04 per cent., 1916, 24·35 and 1917, 26·25 per cent.

Infant and Child Mortality.—The number of infant deaths was 44 or 49 per 1,000 births. As will be seen below this is the lowest infantile death-rate recorded in Cambridge as now constituted, and is considerably lower than any rate recorded in "old" Cambridge.

	No. of Deaths.	Proportion of deaths per 1000 births.	Percentage of total deaths at all ages.	England and Wales deaths per 1000 births.
1913	82	73	12·0	109
1914	78	78	10·7	105
1915	88	88	9·9	110
1916	72	72	10·5	91
1917	53	71	8·3	97
1918	54	65	7·0	97
1919	44	49	6·8	89

The infant deaths in 1919 were distributed as follows:—St Andrew the Less, 33; St Andrew the Great, 5; Chesterton, 4; and Cambridge Without 2.

The chief causes of death amongst infants were:—

	1913	1914	1915	1916	1917	1918	1919
Premature Birth ...	26	17	18	18	15	9	10
Atrophy, Debility & Marasmus ...	11	8	18	8	3	11	4
Diarrhœal Diseases	10	8	6	4	5	2	4
Measles	—	—	6	—	—	1	2
Whooping Cough ...	3	1	—	8	—	4	—
Bronchitis & Pneumonia	8	13	17	12	9	10	10
Tuberculous Diseases	1	2	3	1	2	3	1
Convulsions ...	2	1	4	1	3	4	2
All other Diseases	21	28	16	20	16	10	11
	82	78	88	72	53	54	44

Deaths under 5 years of age :—These totalled in 1919, 23 or 3·7 per cent. of the total deaths at all ages.

They were distributed as follows :—St Andrew the Less, 14; St Andrew the Great, 1; Chesterton, 7; Cambridge Without, 1.

The deaths under five during previous years were as follows :—

	Deaths.	Percentage to total deaths at all ages.
1913	32 ...	... 4·7
1914	24 ...	... 3·3
1915	80 ...	... 9·0
1916	26 ...	... 3·8
1917	18 ...	... 2·8
1918	38 ...	... 4·9
1919	23 ...	... 3·7

The chief causes of death among children 1—5 years of age were :—

	1913	1914	1915	1916	1917	1918	1919
Infectious Diseases— Scarlet Fever, Diphtheria, Measles, Whooping Cough	17	9	50	12	3	9	2
Tuberculosis—Pulmonary	2	—	3	1	—	4	—
,, Other forms	2	1	2	2	3	—	7
Bronchitis & Pneumonia	2	7	19	2	4	12	8
Diarrhœa & Enteritis	1	1	1	—	—	—	2
Convulsions	1	—	1	—	—	1	—
Meningitis	—	—	—	1	2	3	—
Rickets	1	—	1	—	1	—	—
All other Diseases ...	6	6	3	8	5	9	4
	32	24	80	26	18	38	23

MINISTRY OF HEALTH.

TABLE IV.

INFANT MORTALITY, 1919.

Nett Deaths from stated causes at various Ages under 1 year of Age.

See Note (*a*).

CAUSES OF DEATH.	Under 1 week.	1-2 weeks.	2-3 weeks.	3-4 weeks.	Total under 1 month.	1-3 months.	3-6 months.	6-9 months.	9-12 months.	Total Deaths under 1 year.
All causes { Certified	12	..	4	..	16	9	9	8	2	44
All causes { Uncertified	..	..	..	..	..	..	..	..	..	..
Small-pox	..	..	..	..	..	..	..	..	..	..
Chicken-pox	..	..	..	..	..	..	..	..	..	..
Measles	..	..	..	..	..	1	..	1	..	2
Scarlet Fever	..	..	..	..	..	..	..	..	..	..
Whooping Cough	..	..	..	..	..	..	..	..	..	..
Diphtheria and Croup	..	..	..	..	..	..	..	1	..	1
Erysipelas	..	..	..	..	..	..	..	..	..	..
Tuberculous Meningitis	..	..	..	..	..	..	1	..	..	1
Abdominal Tuberculosis (*b*)	..	..	..	..	..	..	..	..	..	..
Other Tuberculous Diseases	..	..	..	..	..	..	..	..	..	..
Meningitis (*not Tuberculous*)	..	..	..	..	..	..	1	..	..	1
Convulsions	..	..	1	..	1	1	..	..	..	2
Laryngitis	..	..	..	..	..	..	..	..	..	..
Bronchitis	..	..	1	..	1	1	3	..	1	6
Pneumonia (all forms)	..	..	..	..	..	..	..	3	1	4
Diarrhœa	..	..	..	..	..	1	..	..	..	1
Enteritis	..	..	..	..	..	1	1	1	..	3
Gastritis	..	..	..	..	..	..	..	1	..	1
Syphilis	..	..	1	..	1	..	1	..	..	2
Rickets	..	..	..	..	..	..	..	..	..	..
Suffocation, overlying	..	..	..	..	..	..	..	..	..	..
Injury at Birth	..	..	..	..	..	..	..	..	..	..
Atelectasis	..	..	..	..	..	..	..	..	..	..
Congenital Malformations (*c*)	1	..	..	..	1	1	1	1	..	4
Premature Birth	7	..	..	..	7	3	..	..	..	10
Atrophy, Debility and Marasmus	4	..	..	..	4	..	..	..	..	4
Other causes	..	..	1	..	1	..	1	..	..	2
TOTALS	12	..	4	..	16	9	9	8	2	44

Nett Births in the year { legitimate ... 817. / illegitimate ... 77.

Nett Deaths in the year of { legitimate infants ... 34. / illegitimate infants 10.

(*a*) The total in the last column of Table IV. is equal the total in column 10 of Table I., and in column 3 of Table III.

(*b*) Under Abdominal Tuberculosis are included deaths from Tuberculous Peritonitis, and Enteritis and from Tabes Mesenterica.

(*c*) The total deaths from Congenital Malformations, Premature Birth, Atrophy, Debility and Marasmus, equal the total in Table III. under the heading Congenital Debility and Malformation including Premature Birth.
Want of Breast Milk is also included under Atrophy and Debility.

(*d*) For references to meaning of any other headings, *see* notes attached to Table III.

VACCINATION.

The information given below has been kindly supplied by Mr Rule, the Vaccination Officer, and relates to the Old Borough only. It will be seen that the proportion of children born who have been successfully vaccinated has been extremely low since the passing of the Vaccination Act 1907.

An interesting side light is thrown upon the conscientiousness of the objection to vaccination of many parents by figures supplied by Dr Rouse, Head Master of the Perse Boys' School. Candidates for free places in the School are required to show evidence of having been vaccinated before admission and for several years Dr Rouse has made a note of the vaccinal condition of these boys. The proportion of unvaccinated is increasing and this year (1920) was found to be 60 per cent. Yet they are all found to agree readily with the rule.

The adult male section of the community is probably better protected now than it has been for many years, and those who are least protected from small pox by vaccination are the infants and young children among whom the mortality from this disease is generally highest.

	1918.	For the period Jan.—June, 1919.
Number of Births registered	595	261
,, ,, Successful Vaccinations	198	72
,, ,, Certificates of Insusceptability ...	1	—
,, ,, Certificates of Exemption	320	146
,, who died Unvaccinated	39	19
,, postponed by Medical Certificate ...	2	3
,, removed to other Districts	13	8
,, not found or removed to places abroad	15	7
,, in abeyance	7	6
Percentage Successfully Vaccinated	33·27	27·58
Percentage Successfully Vaccinated excluding those who died Unvaccinated	35·61	29·75

Number of Statutory Declarations (or Certificates of conscientious objections) actually received during the past 12 years :—

1907	1908	1909	1910	1911	1912	1913	1914	1915	1916	1917	1918
96	409	470	472	439	474	474	448	412	419	336	320

POOR-LAW RELIEF STATISTICS.

I am indebted to Mr J. Congreve, Clerk to the Poor-Law Guardians for the Parish of Cambridge, for the following figures relating to pauperism.

1. Number of persons relieved in Workhouse during six months ended 30th September, 1919 :

(*a*)	Able-bodied	18
(*b*)	Not Able-bodied	136
(*c*)	Insane	2
(*d*)	Children	20
(*e*)	Persons certified under Mental Deficiency Act	2

2.	Number of Vagrants relieved in Casual Wards	665
3.	Number relieved in Children's Home	21
4.	Number of Out-door Poor relieved	336
5.	Number of Out-door Vagrants relieved	Nil

RECORD OF DISEASE INCIDENCE.

The notifications received during the year 1919 were as follows:—Diphtheria, 121; Scarlet Fever, 69; Measles, 772; German Measles, 55; Erysipelas, 15; Cerebro-Spinal Fever, 1; Poliomyelitis, 2; Ophthalmia Neonatorum, 12; Malaria, 17; Pneumonia, 23; Trench Fever, 1; Pulmonary Tuberculosis, 130; Other forms of Tuberculosis, 36. Total, 1254. The case-rate per 1,000 of the population was 20·8.

The Order of the Local Government Board of November, 1915, making Measles and German Measles compulsorily notifiable diseases was withdrawn by the Ministry of Health and those diseases ceased to be notifiable after 31st December, 1919.

Additions made early in 1919 to the list of notifiable diseases were Pneumonia (Acute primary and Influenzal), Malaria, Dysentery, Trench Fever, Acute Encephalitis Lethargica, and Acute Polio-encephalitis, so that at present the list comprises:—

Scarlet Fever.
Diphtheria (including Membranous Croup).
Typhoid Fever (Enteric and Paratyphoid) Fever.
Puerperal Fever.
Cholera.
Plague.
Cerebro-Spinal Fever.
Acute Poliomyelitis.
Acute Polio-encephalitis.
Acute Encephalitis Lethargica.
Erysipelas.
Ophthalmia Neonatorum.
Tuberculosis { Pulmonary. Other.
Small Pox.
Typhus Fever.
Relapsing Fever.
Continued Fever.
Malaria.
Dysentery, Trench Fever { Unless known to have been notified within the preceding 6 months.
Acute Primary Pneumonia.
Acute Influenzal Pneumonia.

The non-notifiable diseases now are:—Measles, German Measles, Chicken-pox, Mumps, Whooping Cough, Influenza, Epidemic Diarrhœa.

TABLE II. **Cases of Infectious Disease notified during the Year 1919.**

Notifiable Disease.	Number of Cases Notified.								Total Cases Notified in each Locality.				Total cases removed to Hospital.
	At all Ages.	At Ages—Years.							1 St Andrew the Less.	2 St Andrew the Great.	3 Chesterton.	4 Cambridge Without	
		Under 1.	1 to 5.	5 to 15.	15 to 25.	25 to 45.	45 to 65.	65 and upwards.					
Small Pox	...	...	...	...	...	...	...	...	...	...	...	...	...
Cholera (C.), Plague (P) ...	...	...	...	...	...	...	...	...	...	...	...	...	...
Diphtheria (including Membranous Croup)	121	1	19	85	11	5	...	...	68	22	27	4	108
Erysipelas	15	...	...	..	1	6	6	2	9	6	...	...	...
Scarlet Fever	69	...	12	46	6	5	...	...	39	10	14	6	51
Typhus Fever	...	...	...	...	...	...	...	...	...	...	...	...	...
Enteric Fever	...	...	...	...	...	...	...	...	...	...	...	...	...
Relapsing Fever (R.) } Continued Fever (C.) } ...	...	...	...	...	...	...	...	...	...	...	...	...	...
Puerperal Fever	...	...	...	...	...	...	...	...	...	...	...	...	...
Measles	772	6	213	524	28	1	...	...	556	70	76	70	9
German Measles...	55	...	1	37	11	6	...	...	12	11	26	6	...
Cerebro-Spinal Fever	1	...	...	...	1	...	...	...	1	...	...	...	1
Poliomyelitis	2	...	...	...	2	...	...	...	1	...	1	...	...
Ophthalmia Neonatorum ...	12	12	...	...	...	...	...	...	10	...	2	...	...
Malaria	17	...	...	...	6	11	...	...	10	2	2	3	...
Pneumonia	23	...	...	2	4	11	4	2	14	4	4	1	...
Trench Fever	1	...	...	...	1	...	...	...	1	...	...	...	...
Pulmonary Tuberculosis ...	130	...	2	23	25	60	17	3	85	17	18	10	...
Other forms of Tuberculosis ...	36	1	9	21	2	2	1	...	24	5	6	1	...
	1254	20	256	738	98	107	28	7	830	147	176	101	*169

* In addition to this number 71 Diphtheria "Carriers," 2 Chicken Pox, 1 Mumps, and 5 Influenza Cases belonging to the Borough; 20 cases of Scarlet Fever, 13 cases of Diphtheria, 3 Diphtheria "Carriers" belonging to different parts of the County; and 1 Small Pox; 4 Small Pox Contacts; 11 cases of Scarlet Fever; 6 cases of Diphtheria; 3 Diphtheria "Carriers"; 10 cases of Measles, 11 Measles Contacts; 2 cases of German Measles, 3 cases of Chicken Pox. 1 Chicken Pox Contact, 7 cases of Mumps, 1 case of Influenza, 1 case of Tonsillitis and 1 case of Urticaria occurring amongst Troops in the Town and District, have been treated at the Infectious Diseases Hospital.

Isolation Hospital (name and situation)—Borough Infectious Diseases Hospital, Mill Road, Cambridge. Total available beds—62. Number of Diseases that can be concurrently treated—?

Diphtheria and Membranous Croup.—The number of cases notified during the year 1919 was 121, and the case-rate per 1,000 of the population was 2·0. The notifications received each year since 1903 and the mortality are as follows :—

	Cases.	Deaths.	Fatality per cent.
1903	68	11	16·1
1904	39	10	25·6
1905	65	18	27·7
1906	31	12	38·7
1907	33	3	9·1
1908	78	6	7·7
1909	59	7	11·8
1910	59	14	23·7
1911	112	19	16·9
1912	193	47	24·3
1913	101	22	21·7
1914	133	22	16·5
1915	68	16	23·0
1916	103	14	13·6
1917	30	4	13·3
1918	49	10	20·4
1919	121	8	6·6

Scarlet Fever.—Sixty-nine cases were notified. The cases were distributed as follows :—thirty nine in St Andrew the Less ; ten in St Andrew the Great ; fourteen in Chesterton ; and six in Cambridge Without.

The record of notifications and deaths since 1903 is as follows :—

Year.	Cases Notified.	Deaths.	Percentage of deaths to cases notified.
1903	284	6	2·1
1904	66	2	3·0
1905	132	2	1·5
1906	101	1	1·0
1907	76	1	1·3
1908	36	—	—
1909	121	1	0·8
1910	141	—	—
1911	331	1	0·3
1912	379	7	1·8
1913	312	4	1·2
1914	176	—	—
1915	87	2	2·3
1916	85	—	—
1917	45	—	—
1918	18	—	—
1919	69	2	2·9

"Return" Cases.—A "return" case is one which has apparently been caused by the release from isolation, either in hospital or at home, of a previous case. The percentage of such cases for several years has been :—1912, 4·8 ; 1913, 7·0 ; 1914, 3·5 ; 1915, 2·9 ; 1916, 1·1 ; 1917 and 1918, none ; 1919, 1·4.

Measles and German Measles.—Compulsory notification of these diseases has been in operation since the end of 1915. The numbers notified each year has been :—

	Measles.	German Measles.
1916	17	74
1917	234	106
1918	391	118
1919	772	55

The age and seasonal distribution of Measles during 1919 was :—

	Jan.	Feb	Mch.	Apl.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
0—5	19	44	42	40	28	22	14	6	1	1	1	1	219
5—15	34	80	103	87	52	55	53	2	1	—	18	39	524
15—25	1	4	5	—	3	1	2	2	1	—	5	4	28
25 & over	1	—	—	—	—	—	—	—	—	—	—	—	1
	55	128	150	127	83	78	69	10	3	1	24	44	772

The regulations of 1915 by which provision was made for the compulsory notification of Measles and German Measles, were rescinded during the year, so that these diseases ceased to be notifiable as from the 31st December, 1919. The principal source of information as to the prevalence of Measles is now the system of notification by the Head Teachers of the Public Elementary Schools which has been in existence for many years. This still enables the Local Authority to continue practically all the existing measures for combating the mortality from Measles. These measures include—visitation by School Nurses, the domiciliary nursing of selected cases by arrangement with the District Nursing Association, the reception into the Infectious Diseases Hospital of cases which required to be removed on account of special circumstances, and convalescent home treatment required in certain cases to establish full recovery.

The number of cases nursed by the District Nurse was 26, and 9 were admitted into the Infectious Diseases Hospital.

The figures given below show the record of Measles mortality during the past twenty years :—

	Deaths.	Death rate.		Deaths.	Death rate.
1900	1	0·02	1910	0	0·00
1901	2	0·05	1911	31	0·77
1902	44	1·14	1912	3	0·05
1903	0	0·00	1913	1	0·01
1904	12	0·30	1914	2	0·03
1905	9	0·23	1915	59	1·09
1906	1	0·02	1916	1	0·01
1907	0	0·00	1917	1	0·01
1908	33	0·83	1918	2	0·03
1909	1	0·02	1919	3	0·05

Whooping Cough.—The only notifications of this disease are received from the Schools. In 1919, 38 cases were notified.

The mortality record for the past twenty years is given below :—

	Deaths.	Death rate.		Deaths.	Death rate.
1900	21	0·55	1910	8	0·20
1901	0	0·00	1911	0	0·00
1902	5	0·13	1912	19	0·23
1903	7	0·18	1913	12	0·21
1904	0	0·00	1914	2	0·03
1905	0	0·00	1915	2	0·03
1906	16	0·40	1916	15	0·26
1907	0	0·00	1917	0	0·00
1908	32	0·80	1918	1	0·01
1909	0	0·00	1919	1	0·01

Tuberculosis.—The number of new cases notified each year from 1912 was as follows :

	1913	1914	1915	1916	1917	1918	1919
Pulmonary Tuberculosis	48	102	145	111	105	107	130
Non ,, ,,	13	13	11	41	66	28	36
	61	115	156	152	171	135	166

The age and sex distribution of the cases was :—
Pulmonary Cases :—

	0—5	5—15	15—25	25—45	45—65	65 & over	Total
Males	2	13	10	36	12	1	74
Females	—	10	15	24	5	2	56
Non-Pulmonary Cases :—							
Males	6	11	1	1	—	—	19
Females	4	10	1	1	1	—	17

The number treated in an Institution (Sanatorium or Poor Law Infirmary) was 62 out of 166 notified or 37 per cent. The proportion in 1918 was 27 per cent.

The number dying each year from various forms of Tuberculosis was :—

	Pulmonary			All other forms		
	Male	Female	Total	Abdominal	Meningeal	Others
1913	31	17	48	2	4	7
1914	28	33	61	2	2	8
1915	29	26	55	3	7	4
1916	36	25	61	2	5	2
1917	23	26	49	4	7	9
1918	45	31	76	1	3	5
1919	16	19	35	4	9	4

The proportion of deaths from Pulmonary Tuberculosis occurring in Institutions for a number of years has been :—

	Deaths in Institutions	Total Deaths	Proportion
1913	5	48 ...	10·4
1914	11	61 ...	18·0
1915	5	55 ...	9·0
1916	11	61 ...	18·0
1917	10	49 ...	20·4
1918	21	76 ...	27·6
1919	11	35 ...	31·4

The number of school children examined and reported upon by the Tuberculosis Officer was:—In 1916, 58; in 1917, 105; 1918, 41; 1919, 51.

Influenza.—The outbreak recorded in last year's report was followed by a recrudescence of the disease similar in type to the summer and autumn outbreaks of 1918 but of much shorter duration. The number of deaths caused in 1919 was 31, making for the whole outbreak of 1918—19 a total loss from this cause of 151 lives.

The areas in which these 151 deaths occurred are shown in the following table:—

District.	1918 outbreak.	Week ending											Total
		Jan.	Feb.		March					April			
		11	15	22	1	8	15	22	29	5	12	19	
Castle End	5	—	—	—	—	—	—	—	—	—	—	—	5
Centre of Town ...	17	—	2	2	1	—	1	—	—	—	—	—	23
New Town	20	—	—	1	4	2	—	1	—	—	—	--	28
New Cherryhinton	9	—	—	1	—	1	—	—	—	—		—	11
Romsey Town ...	16	—	—	1	—	—	—	—	—	1	—	—	18
Sturton Town ...	18	—	—	—	—	1	1	1	—	—	—	—	21
Newmarket Rd and District	13	—	—	—	—	—	1	1	—	—	—	—	15
New Chesterton ...	18	1	1	—	—	—	—	2	—	—	—	1	23
Old Chesterton ...	1	—	—	—	1	1	—	—	—	—	—	—	3
Newnham	3	—	—	—	1	—	—	—	—	—	—	—	4
Totals	120	1	3	5	7	5	3	5	—	1	—	1	151

The Age and Sex distribution of the deaths was:—

	Males	Females	Total
Under 1 year ...	— ...	— ...	—
1 and under 5 ...	2 ...	3 ...	5
5 ,, ,, 10 ...	1 ...	7 ...	8
10 ,, ,, 15 ...	3 ...	3 ...	6
15 ,, ,, 20 ...	7 ...	10 ...	17
20 ,, ,, 25 ...	8 ...	12 ...	20
25 ,, ,, 35 ...	17 ...	34 ...	51
35 ,, ,, 45 ...	5 ...	7 ...	12
45 ,, ,, 55 ...	3 ...	7 ...	10
55 and over ...	11 ...	11 ...	22
Total	57	94	151

The Influenza Regulations of 1918 conferring certain powers upon Local Authorities were rescinded in May 1919, but it appears to be the intention of the Ministry of Health to re-enact them in a modified form should occasion arise.

It is still the duty of medical practitioners to notify cases of Acute Influenzal Pneumonia to the Medical Officer of Health. The Regulations relating to this came into operation on the 1st March, 1919.

Small Pox.—No cases of this disease have occurred in Cambridge since 1903. One Military case from Bishop Stortford was admitted to the Small Pox Huts on Good Friday and died on Easter Monday.

Ophthalmia of the New-born.—This disease became notifiable on April 1st, 1914. The number of cases notified each year since has been :

1914	1915	1916	1917	1918	1919
11	6	17	14	6	12

Malaria.—17 cases were notified during the year, all being recurrences of the disease among men who had contracted it while on service overseas. So far no indigenous case has been reported.

Poliomyelitis.—Two cases were notified in 1919, one in May and the other in October. Both were males aged 16½ and 23 years respectively, and both cases proved fatal, one on May 25th and the other on October 24th. In neither case could any connection with a previous case be traced ; the first was a youth employed in the town, while the second was an undergraduate who had symptoms of illness when he came to Cambridge.

Cerebro-Spinal Fever.—The only case (a young lady) was notified on April 10th, and made a rapid and complete recovery. The diagnosis was confirmed bacteriologically. The examination of swabs from contacts gave negative results in every instance.

Infectious Diseases amongst Troops.—A few cases still continue to be received into the Infectious Diseases Hospital, the total for 1919 being 64.

Cancer.—Under this heading are grouped all deaths registered as due to Cancer, Carcinoma, Malignant disease, Epithelioma and Sarcoma.

The annual average for years 1893—1902 is 37 or 0·97 per 1000 of the population, and for 1903—1912 is 46 or 1·05.

The deaths and death-rate for the years 1913—1919 are set out in the following table:—

	Deaths.		Total.	Death-rate per 1000
	Males.	Females.		
1913 ...	34	36	70	... 1·22
1914 ...	24	43	67	... 1·17
1915 ...	33	50	83	... 1·53
1916 ...	37	41	78	... 1·49
1917 ...	41	41	82	... 1·57
1918 ..	28	43	71	... 1·36
1919 ...	27	52	79	... 1·36

Diseases of the Respiratory System.—The deaths recorded from the principal diseases in this group are set out in the following table :—

	Average 1903—12	1913	1914	1915	1916	1917	1918	1919
Bronchitis	39	29	44	93	74	50	47	64
Pneumonia	20	15	11	38	21	20	25	17
Broncho-pneumonia ...	16	8	24	28	11	15	27	17
Others	8	17	16	16	14	10	5	6
Total	83	69	95	175	120	95	104	104

Anthrax.—A consignment of cheap imitation badger shaving brushes from Japan was found to have been the cause of several cases of Anthrax in England, and towards the end of the year information was received of small quantities having been placed on sale in Cambridge. As a result of enquiry it was found that only one brush had been sold to an unknown customer. The remainder were returned to the importer.

MATERNITY AND CHILD WELFARE.

The body primarily responsible for the care of infants and children under five years of age, and for expectant and nursing mothers is the Statutory Committee formed under the Maternity and Child Welfare Act, 1918. The Committee in its present form was constituted in November, 1918, and consists of the members of the Public Health Committee together with one representative from each of the following bodies:—Cambs. County Insurance Committee, Cambridge Association for Maternity and Child Welfare, Friendly Societies Council, National Council of Women, Addenbrooke's Hospital General Committee, and two from the Cambs and Hunts Branch of the British Medical Association.

Co-operating with this Committee there are various voluntary bodies, viz :—the Cambridge Association for Maternity and Child Welfare, the District Nursing Associations, Addenbrooke's Hospital, and Invalid Children's Aid Association.

In January 1919 the two Health Visitors employed by the Association for Maternity and Child Welfare were taken over by the Local Authority, and on the same date the Local Authority undertook to provide and pay for the medical attendance at the Consultation Centres. The Voluntary Association is now responsible for the work at the Centres with the exception of the employment and payment of Health Visitors and Medical Attendants.

Work of the Health Visitors.—The Health Visitors have visited 82 per cent. of the infants born in 1919. The figures given in the following table show the number of visits paid in both districts into which the Borough is divided, to these infants, young children, and mothers :—

	District 1.	District 2.	Total
First visits to Infants ...	338	385	723
Subsequent "	1051	1072	2123
Visits to children 1—5 years ...	184	201	385
First visits to Expectant Mothers	54	19	73
Subsequent " "	22	15	37
Other Cases	45	86	131
Totals ...	1694	1778	3472

Four hundred and seventy seven (74 per cent) were found to be breast-fed, 95 (or 15 per cent) partly breast-fed, and 77 (or 11 per cent) not breast-fed at all. Breast fed in this connection means that the infants were entirely fed at the breast for their first six months.

In 311 instances (48 per cent) "comforters" were used continually, and in 76 instances occasionally.

In only one instance was a bottle with a long tube found to be in use, and that only during the night. Five children were spoon fed.

In addition to children born in 1919, 376 children born in 1918 were visited in 1919, the number of visits paid to these being 977.

Care of the Expectant Mother—Ante-natal Clinic.—This very important part of the work cannot yet be said to be in a satisfactory position. It is work which primarily devolves upon the attendant at the birth of the child, and therefore upon Doctors and Midwives. At present the greatest barrier to the effective care of the expectant mother is the fact that a very large proportion of women do not engage either Doctor or Midwife until a comparatively short time before the date of confinement. Matters are however improving in this respect, while on the part of the doctors and midwives there is now a greater realisation of the need for the care of the expectant mother with a view to the removal of conditions prejudicial to the health of the mother and child. The opening of an Ante-natal Clinic in the current year should be a great advance and will provide a centre to which midwives will be able to bring patients for advice. In addition to consultations with the Medical Officer in charge, and home visitations by the midwives, the Clinic should bring within its scope work of an educational character, e.g. instruction in the hygiene of pregnancy, mothercraft, the making of baby garments, all specially useful to the young mother ; the provision of milk, or if necessary meals ; and dental treatment. Much of this work has already been undertaken at the "Mothers Schools," and the Town Council has now approved a scheme for dental treatment. Provision has already been made for the complicated cases and for cases occurring in homes unsuitable for confinement, at Addenbrooke's Hospital, including consultations and the provision of hospital beds when required.

There is room also for something different from hospital beds, in the shape of a Maternity Home for people of modest means. At present this is a class quite unprovided for in this way, although there is an undoubted need for some provision to be made.

Home Helps.—These are women who are engaged to carry on the work of a home at a time when by reason of illness or confinement, the mother is unable to perform her usual household duties.

In 1918 six women who had been doing this work on their own account received some training from the "Health League" through Mrs Weekes, and the Town Council authorised the payment of £1 per head per annum for a number not exceeding fifteen women on condition that they underwent a course of training given by the Health League.

Only four of the women are now available and it is proposed to train others for this work. Several members of the V.A.Ds. are also taking up this work and will, it is hoped, form the nucleus of a voluntary body of home helps whose service will be available in times of emergency such as arose during the influenza outbreak of 1918—19.

Infant Consultations.—There are four Consultation Centres which are open once a week, where infants, young children up to school age and their mothers attend. These centres are provided and managed by the Cambridge Association for Maternity and Child Welfare, the Medical and Health Visiting staff being provided by the Corporation.

Summary of attendances at the Infant Consultations during 1919 :—

	Under 1 year.		1 to 5 years.	
	Children.	Attendances.	Children.	Attendances.
Castle End ...	143 ...	584 ...	55 ...	167
Newmarket Road	257 ...	980 ...	127 ...	467
New Town ...	153 ...	623 ...	70 ...	143
Romsey Town ...	164 ...	568 ...	128 ...	305
Totals ...	717 ...	2755 ...	380 ...	1082

Distribution of Milk from Infant Consultation Centres.—For several years dried milk has been sold at the Infant Consultation Centres for the use of infants and young children and nursing mothers. The prices charged have varied from time to time, but the actual wholesale price has never been exceeded, while in certain cases this has been reduced or the milk given free. The prices charged at present are 2/2 per lb. where there are not more than two children, and 1/10 where there are over two children in the family.

The Town Council, since October 1917, has paid the difference between the cost and the actual price paid at the Centres up to 4d. per lb.

The total amount of dried milk used at the Centres in 1919 was 6404 lbs, and the amount paid by the Town Council for the year ending 31st March, 1920, was £129 13s. 4d.

Midwives Act.—The County Council is the Local Supervising Authority under the Midwives Act, but on a representation being made by the Town Council that it would complete and render more efficient the work of that Council in connection with Maternity and Child Welfare, the County Council delegated certain powers and duties to the Town Council, as follows :—

1. General supervision over all registered midwives practising within the Borough of Cambridge including (*a*) the reception of notification from midwives of having advised calling in medical help, deaths, still births, laying out the dead, and liability to be a source of infection ; (*b*) the routine inspection of the midwife's register of cases, bag of appliances, etc., and place of residence ; (*c*) the investigation of the midwife's mode of practice with special inspections and enquiries as occasion requires.

2. The suspension (in consultation with the County Medical Officer) from practice of a midwife if such suspension appears necessary in order to prevent the spread of infection.

These powers and duties shall be exercised subject to the following conditions :—

The investigation of charges of malpractice, negligence and misconduct are reserved to the County Council.

All inspections shall be carried out by the Medical Officer of Health or his Assistant, or by a fully trained nurse with C.M.B. certificate, under his direction. The services of the County Inspector of Midwives should, where practicable, be made use of for an inspection otherwise than by the Medical Officer of Health.

There are at present 15 Midwives in practice in Cambridge, and all the routine inspections required by the Rules of the Midwives Board are made for the Medical Officer of Health by the County Inspector of Midwives (Miss Bills).

The following notifications from Midwives were received during the year:—Still Births 12; Ophthalmia Neonatorum 2; Sending for Medical Help 53; Laying out Dead Body 2.

HOUSING.

An estimate of the housing needs of Cambridge was supplied to the Ministry of Health in 1919 and showed:—

1. The number of working class houses required to meet the unsatisfied demand to be 450 to 500 at once, and 100 per annum each year after.

2. The number required to replace dwellings unfit for habitation to be 141.

3. The number requiring repair to remedy serious defects to be 121.

To meet this deficiency various proposals have been considered of which the most promising appear to be: 1. The site in Cherryhinton known as the Avenues site of seventeen acres. This site together with the lay out and types of houses have been approved by the Ministry of Health. It has the advantage of having already in existence roads running through it together with sewers and water and gas mains. The number of houses proposed for this site is 113.

2. A site in Chesterton of 27 acres has been approved by the Housing Commissioner but has not advanced beyond this step yet.

3. Twenty houses in Stanley Road are in course of erection.

It is proposed also to build eighteen houses in Garlic Row, Newmarket Road.

Temporary housing accommodation.—In the autumn of 1919 the buildings of the First Eastern General Hospital were, with the sanction of the Ministry of Health, obtained as a matter of emergency to relieve the very serious position caused by the lack of houses in the Town. The buildings are being converted into dwellings of three types, viz.:—

Type A. Three blocks of tenements or "sets" providing 12 two-roomed "sets" and 3 three-roomed "sets."

Type B. Ten blocks providing 10 two-roomed and 70 three-roomed "sets."

Type C. Five blocks with 30 tenements of four rooms each.

The weekly rentals are for two rooms, 8/6; for three rooms, 10/6; and for four rooms, 12/6; inclusive of rates, water (hot & cold), one electric light to each "home," and the use of baths and wash-house, certain storage accommodation and service in connection with the sanitary blocks which are used in common.

Arrangements can also be made for sets of five or six rooms if required.

The floor space provided in each type is :—

Type A. Living room, 20 ft by 12 ft.
Bedroom, 12 ft or 14 ft by 9 ft.
Scullery Cupboard, 6 ft by 9 ft.

Type B. Living room, 16 ft by 12 ft.
Bedrooms, 12 ft or 8 ft by 9 ft.
Scullery Cupboards, 4 ft by 9 ft or 6 ft by 9 ft.

Type C. Living room varies from 12 ft by 13 ft to 20 ft by 12 ft.
Bedrooms, 12 ft by 9 ft.

The partition walls between the separate tenements are formed by $2\frac{1}{2}$ in. cement slabs, and the partitions between the living and bedrooms of $\frac{1}{4}$ in. asbestos sheeting on a wooden frame.

Each living room is provided with a small cooking range placed on a raised cement hearth with an iron smoke flue.

The first part of the scheme provided for 134 tenements and utilises only 18 out of the 24 hospital wards. There is thus room for extension should the demand for accommodation require it.

The first tenant entered into occupation on December 13th, 1919, and at the present time (July, 1920) there are 134 tenements in occupation, housing a total of 417 persons.

The whole scheme will provide 212 tenements, but as the number of applicants is now 242, it is obvious that there is urgent need for expedition with the permanent schemes.

In December, 1919, Mr Pitstow, the Superintendent of the temporary housing scheme, presented the following statistics showing the number of applications received at that time, the accommodation asked for, and the reasons given by applicants for requiring the accommodation.

	Room tenement.					
	2	3	4	5	6	Tenants.
1. Coming family	—	2	2	—	1	5
2. Living apart	2	5	6	—	—	13
2a. Income exceeded (included in 2)...	—	1	—	—	—	
3. Notice to quit	6	7	11	—	1	25
3a. Asked to leave (not included in 3)	2	2	2	—	—	6
4. Living in Lodgings	8	18	4	—	—	30
5. Living with relatives	9	15	1	—	—	25
6. Overcrowed	—	1	2	1	—	4
7. Intending to marry	3	3	1	—	—	7
8. Miscellaneous	3	3	—	—	1	6
	33	55	29	1	3	121
Provided for in 1st part of scheme	31	73	30	0	0	134

SALE OF FOOD AND DRUGS ACTS.

The following table shows the number and character of the samples taken in 1919.

	Number	Genuine	Not Genuine	Prosecutions	Convictions
Milk (formal)	77	74	3	1	1*
Milk (informal)	1	1	—	—	—
Cream (formal)	3	3	—	—	—
Coffee ,, ...	4	4	—	—	—
White Pepper (formal)	5	5	—	—	—
Ground Ginger ,, ...	7	7	—	—	—
Corn Flour ,, ...	2	2	—	—	—
Arrowroot ,, ...	1	1	—	—	—
Lemonade Powder ,, ...	4	4	—	—	—
Bread ,, ...	4	4	—	—	—
Vinegar ,, ...	4	4	—	—	—
Peas ,, ...	1	1	—	—	—
Lard ,, ...	2	2	—	—	—
Self Rising Flour (informal) ...	1	1	—	—	—
,, ,, ,, (formal)	3	3	—	—	—
Bun Flour (informal)...	1	1	—	—	—
,, ,, (formal)	3	3	—	—	—
Egg Powder (informal)	2	2	—	—	—
Baking Powder ,, ...	2	2	—	—	—
Treacle ,, ...	1	1	—	—	—
Total	128	125	3	1	1

* This conviction was appealed against and was quashed at the Quarter Sessions held on January 8th, 1920, no costs being allowed.

The number of samples taken each year since 1909 is as follows :—

	Number	Not Genuine	Percentage not Genuine	Prose-cutions	Convic-tions
1909 ...	58	9	15·5	3	1
1910 ...	106	12	11·3	5	2
1911 ...	114	14	12·3	8	7
1912 ...	126	36	28·5	4	2
1913 ...	120	27	22·5	5	4
1914 ...	165	13	7·8	9	9
1915 ...	107	9	8·4	9	5
1916 ...	123	12	9·7	8	8
1917 ...	124	12	9·7	9	8
1918 ...	109	7	6·4	6	6
1919 ...	128	3	2·3	1	1

An explanation suggested for the very remarkable drop in the number of adulterated samples of milk is the fact that it has paid better to sell milk than to make butter. Consequently there is practically no abstraction of milk-fat and no need to keep up the bulk of the supply by watering.

Administrative action regarding samples reported not genuine:—

Name of Articles	Register No.	Result of Analysis.	Result of action under Sale of Food and Drugs Acts.	Remarks.
Milk	66	19 % deficient in fat	Fined £1.	Defendant appealed, conviction quashed at Quarter Sessions.
Milk	72	17 % deficient in fat	Check samples taken by an appeal to the Cow. 85 Fat 4·10 86 " 3·45 87 " 3·30 88 " 3·35 Average 3·55	Summons withdrawn owing to error in wording by Magistrates clerk.
Milk	81	7 % deficient in fat	"Appeal to the Cow" check on No. 66 taken outside Borough Boundary. 81 Fat 2·77 82 " 3·80 Average 3·28	

Only one vendor was prosecuted for selling milk not up to the standard. The conviction was quashed by the Recorder at the Quarter Sessions after hearing the case de novo. Defendant proved that nothing had been added to or taken from the milk, that it was sold as it came from the cow, citing Hunt v. Richardson.

As the law stands at present milk may be produced for quantity and not for quality even though a 3 per cent. minimum of milk fat is very low. Representation is being made to the Ministry of Health on this matter.

As a result of two samples of milk containing only 3 per cent. of milk fat, a letter was sent to each of the purveyors, calling their attention to the poor quality of the milk.

All samples likely to contain preservatives were examined for these substances, but in none of the samples was any preservative found.

Sixteen samples of milk were taken "in course of delivery" at the Railway Station, at Institutions, and at time of delivery to the purveyor.

Three samples of Cream were taken for analysis during the year under the Public Health (Milk & Cream) Regulations, 1912. Restrictions on the sale of this commodity were in vogue for the greater part of 1919.

PUBLIC HEALTH (MILK AND CREAM) REGULATIONS, 1912.

1. Milk and Cream not sold as Preserved Cream.

	No. of samples examined for Preservatives (*a*)	No. with Preservatives present (*b*)
Milk	78	—
Cream	1	—

2. Cream sold as Preserved Cream.

a. Instances for samples of correct label :—
Statements correct 2
Statements incorrect ... 0

b. Milk fat in Cream sold as Preserved Cream :—
Over 35 per cent 2
Under 35 per cent 0

c. Instances of Article V. (Part II) not complied with 0

FOOD SUPPLIES.

There are now 25 Slaughterhouses in the Borough, 12 Licensed and 13 Registered. Six of the licensed and 7 of the registered premises are in good or fairly good condition. Most of the slaughtering is done in 12 slaughterhouses and in 1919 amounted to 2753 cattle, 17,773 sheep, 5335 pigs, and 1386 calves. About one quarter of the cattle and nearly all the sheep together with about 90 per cent of the calves were slaughtered in the "Government" slaughterhouse (Messrs. Warrington & Sons), while 50 per cent. of the pigs were killed at Mr Winton Smith's premises.

The total amount of meat condemned in 1919 was:—

	cwts	st.	lbs.
Beef	123	7	6
Mutton	13	0	7
Pork	31	0	8
Veal	5	2	1
	173	2	8

Up to the beginning of December, 1919, all animals in poor condition from any cause ("casualty" cattle) were brought to the Government Slaughterhouse for inspection before distribution, the average being about two weekly. From that time, when control was removed, casualties have practically vanished, and the question arises as to the fate of this inferior meat, for it is pretty safe to assume that it is finding a market somewhere.

The need for a Public Slaughter-house.—The experience gained during the war has shown very clearly the advantage to the public of centralising slaughtering. It facilitates inspection and gives reasonable assurance that only sound meat is used for food. Under the old system this is practically impossible.

Other foods condemned during the year included:—

	cwts	st.	lbs.
Fish	2	2	2
Fruit and Vegetables	105	4	13½
Butter	2	0	11
Bacon	42	5	5½

Rabbits 134, and Chickens 96.

Contamination:—The handling and distribution of food and its exposure in open shops, many of which are situated in busy thoroughfares, are common sources of contamination. It is a common sight to see meat and bread conveyed in open carts and on bicycles without any covering, while milk is handled in a fashion which makes cleanliness impossible. There has been quite a noticeable increase in the amount of dirt found in milk although it must in justice to dairymen be admitted that this is partly due to their being unable to obtain sufficient satisfactory labour. Cleanliness in these matters is largely a matter of education and if the public desire it they must be prepared not only to demand it but also to pay for it. It is only a few years ago that a leading firm of bakers in this town asked their customers if they wished to have their bread wrapped in paper and stated that they were prepared to do this free of cost. Only three replied that they wished to have this done.

COMMON LODGING HOUSES.

There are now only seven common lodging houses as compared with ten in pre-war times, making a total reduction of 96 in the number of beds. In spite of this the accommodation still seems to be in excess of the actual requirements.

FACTORIES AND WORKSHOPS.

1.—INSPECTION.

INCLUDING INSPECTIONS MADE BY THE INSPECTOR OF NUISANCES.

Premises.	Inspections.	Written Notices.
Factories (including Factory Laundries)	52	5
Workshops (including Workshop Laundries and Bakehouses)	464	10
Workplaces	83	11
	599	26

2.—DEFECTS FOUND.

Nuisances under the Public Health Act:	No. of Defects. Found.	Remedied.
Want of Cleanliness	17	17
Want of Ventilation	2	2
Overcrowding	2	2
Want of Drainage of Floors	1	1
Other Nuisances	12	12
Sanitary Accommodation { insufficient		
Sanitary Accommodation { unsuitable or defective ..		
Sanitary Accommodation { not separate for sexes ...		
Offences under Factories and Workshops Act:		
Illegal occupation of underground Bakehouse (S. 101)	0	0
Breach of special sanitary requirements for Bakehouses (SS. 97 to 100)	14	14

3.—HOME WORK.

List of Out-Workers (Section 107):

List received from employers. Wearing Apparel—	Total Lists.	Twice in the Year. Lists.	Twice in the Year. Out-workers.	Once in the Year. Lists.	Once in the Year. Out-workers.
(1) Making, etc. ..	96	47	896	2	12
(2) Cleaning and Washing	—	0	0	0	0
Addresses of Outworkers { Received from other Councils		0	0	3	3
Addresses of Outworkers { Forwarded to other Councils		0	0	6	93
Prosecutions (failure to send in lists)			0		0
No. of Inspections of Outworkers' Premises			110		
Outwork in unwholesome Premises (Sec 158)			3		
Outwork in infected Premises (Secs. 109, 110)			0		

4.—REGISTERED WORKSHOPS.

Workshops on the Register (S. 131) at the end of the year 526

5.—OTHER MATTERS.

Matters Notified to H.M. Inspector of Factories :

	Class.	Number.
Failure to affix Abstract of the Factory and Workshop Act (S. 133)		0
Action taken in matters referred by H.M. Inspectors as remediable under the Public Health Acts, but not under the Factory Acts (S. 5)	Notified by H.M. Inspector ...	9
	Reports of Action taken sent to H.M. Inspectors	9
Other		0

Underground Bakehouses (S. 101) :

Certificates granted during the year	0
In use at the end of the year	4

CANAL BOATS.

Annual Report under the Canal Boats Acts, 1877—1884.

The number of boats inspected during the year was 3 (7 inspections)

There were no infringements of the Acts and Regulations.

No legal proceedings were taken.

There were no women or children on board and no case of infectious disease has been notified or traced.

No boats have been detained for cleansing or disinfection.

The Cambridge Corporation is not a Registration Authority.

RAG AND FLOCK ACT.

Five samples of flock were submitted to the Public Analyst for analysis and were found to be in conformity with the Regulations.

RECORD OF SANITARY INSPECTORS' WORK DURING 1919.

	Total.
Inspections :—	
Number of premises visited on complaint	264
Number of premises visited in connection with infectious disease	23
Total number of inspections and re-inspections ...	3705
Notices :	
Preliminary Intimations	289
Statutory Notices	21
Summonses	—
Houses (Housing Act, 1909) :	
Houses inspected—house to house	199
Number of houses represented	2
Number of Closing Orders made	2
Number of houses made habitable after Closing Order	0
Number of houses demolished voluntarily	0
Number of houses demolished after closing Order ...	0
Common Lodging Houses :	
Number registered	7
Number of inspections	93
Number of Contraventions of Bye-Laws	—
Number discontinued since 1st January, 1919	1
Factories :	
Number of inspections	52
Number of defects found	5
Number of defects remedied	5
Workshops :	
Number on register...	526
Number of inspections	464
Number of defects found	13
Number of defects remedied	13
Bakehouses :	
Number on register	68
Number of inspections	170
Number of defects found	14
Number of defects remedied	14
Number cleansed and limewashed	94
Slaughterhouses :	
Number registered	13
Number licensed (five annual licenses)	12
Number of inspections	1379
Number of defects found	12
Number of defects remedied	12
Cowkeepers :	
Number on register	23
Number of inspections	119
Number of defects found	—
Number of defects remedied	—

DAIRIES AND MILKSHOPS:	
Purveyors on register	59
Number of inspections	106
Number of defects found	5
Number of defects remedied	5
Cleansed and limewashed	35
FOOD AND DRUGS ACTS:	
Samples taken	128
Number adulterated	3
Prosecutions	1
Convictions	1
RAG AND FLOCK SAMPLES	5
SCHOOLS:	
Number of inspections	32
Number of defects found (re W.C.'s etc.)	3
VANS:	
Number inspected	38
Number found unsatisfactory	4

Description of Sanitary Work carried out:—

HOUSES:—	
Cleansed and limewashed	19
Provided with damp proof courses	13
Wood floors ventilated and repaired	32
Roofs, gutters and downspouts fixed or repaired ...	392
Rainwater pipes disconnected from drains	23
New floors laid	30
New sinks fixed	24
Supplied with a sufficient supply of water	6
Accumulation of manure or refuse removed	84
Nuisances arising from keeping swine and other animals abated	22
Pavements of yards repaired	44
Pavements of yards relaid with impervious material ...	28
Overcrowding abated	9
DRAINS:	
New drains constructed	10
Intercepted from sewer and ventilated	11
Waste pipes of sinks disconnected	6
" " " trapped or renewed	15
Cleansed or repaired	150
Drain openings removed from inside buildings	10
Smoke tests applied	47
Water tests applied	—
WATER CLOSETS:	
Provided with flushing cisterns	45
Repairs to flushing cisterns	18
Closets cleansed or limewashed	38
New "pans" provided	58
Repaired	80
SMOKE OBSERVATIONS	5
MISCELLANEOUS WORKS NOT CLASSIFIED ABOVE	256

DISINFECTION.

The following summary shows the amount of work done during the year.

Disease, etc.	No. of Articles.	No. of Rooms.
Small Pox	67 ...	2
Scarlet Fever	1330 ...	75
Diphtheria	2399 ...	95
Typhoid Fever	18 ...	—
Cerebro-Spinal Fever	60 ...	16
Measles	— ...	29
Chicken Pox	— ...	14
Influenza	37 ...	22
Phthisis	285 ...	25
Pneumonia	— ...	9
Cancer	124 ...	9
Sepsis	650 ...	—
Vermin	94 ...	4
Scabies	153 ...	3
Miscellaneous	73 ...	12
For Military—		
Dressings, Clothing, Bedding, etc. ...	16405 ...	—
Totals	21695	315

The articles disinfected include :—

	1918	1919
Beds	38 ...	58
Mattresses	1710 ...	1215
Palliasses	2 ...	—
Bolsters	1758 ...	937
Pillows	3242 ...	2400
Sheets	256 ...	327
Blankets	19873 ...	3215
Quilts	180 ...	215
Cushions	148 ...	83
Articles of Clothing	15917 ...	7429
Packets of Surgical Dressings	9641 ...	3104
Other Articles...	7297 ...	2712
Totals	60062	21695

Of the above articles 16405 were for the military.

Number of Stovings	682 ...	319
Number of visits to infected houses ...	138 ...	232

INFECTIOUS DISEASES HOSPITAL.

The number of cases dealt with in Hospital during 1919 was as follows :—

	In Hospital Dec. 31st, 1918	Admitted.	Discharged	Died.	In Hospital Dec. 31st, 1919
Small Pox	—	1	—	1	—
Scarlet Fever	5	82	80	3	4
Scarlet Fever Contacts ...	—	2	2	—	—
Small Pox Contacts	—	4	4	—	—
Diphtheria	1	127	102	6	20
Diphtheria "Carriers" and Contacts	1	77	69	—	9
Measles	—	19	19	—	—
Measles Contacts	2	11	13	—	—
German Measles	—	2	2	—	—
Chicken Pox	—	5	5	—	—
Chicken Pox Contacts ...	1	1	2	—	—
Mumps	—	8	8	—	—
Typhoid Fever	1	—	1	—	—
Cerebro-Spinal Fever... ...	—	1	1	—	—
Influenza	—	6	5	1	—
Tonsilitis	—	1	1	—	—
Urticaria	—	1	1	—	—
Totals	11	348	315	11	33

The following table gives details as to the average cost of maintenance per patient, etc., for the past twenty-one years :—

Year.	Total treated.	Average daily number.	Average residence in days.	Daily cost perhead for Food.		Daily cost per head for Food and Drugs.		Cost per patient per day		Average cost per patient.		
				s.	d.	s.	d.	s	d.	£	s.	d.
1898-9	121	14·0	42·3	1	1¾	1	4½	5	2½	11	1	3¾
1899-00	125	13·0	38·0	1	2½	1	5	5	4	10	2	10½
1900-1	127	16·5	47·4	1	0¼	1	1½	4	2½	9	19	10
1901-2	98	10·7	39·8	1	2	1	4½	7	6¾	15	1	10
1902-3	245	28·1	41·9		10½		11½	4	0	8	8	1¾
1903-4	269	31·1	42·4		11	1	0	4	2	8	17	2¾
1904-5	127	11·0	31·7		11½	1	1½	8	0¾	13	12	1½
1905-6	148	15·0	37·0	1	1¼	1	2½	7	1½	13	4	2½
1906-7	179	19·1	38·9		11¼	1	1	6	1	11	17	6½
1907-8	152	12·3	29·7		11½	1	1¾	8	2½	12	3	6½
1908-9	185	15·1	29·8	1	0¾	1	3½	7	0	10	9	2¼
1909-10	223	21·9	35·8		10¾	1	1	5	1½	9	1	9¾
1910-11	240	23·3	35·4		10½	1	1¼	4	10½	8	12	8½
1911-12	513	46·0	32·8		9¼		11¼	3	3	5	6	7¾
1912-13	569	53·7	34·4		8¾		11	3	0½	5	5	0¼
1913-14	407	42·8	38·4		8¾		11¼	3	5	6	11	1¾
1914-15	441	32·5	26·9		10¼	1	0½	4	2¾	5	13	11¾
1915-16	436	33·6	28·2		11½	1	1	4	4½	6	3	7½
1916-17	411	32·0	28·4	1	2¼	1	3¾	4	7	6	10	2¼
1917-18	381	23·7	22·7	1	6½	1	8¼	5	10¾	6	11	2¼
1918-19	396	26·8	24·7	1	4¾	1	6½	6	0½	7	9	4¾

The hospital expenditure for a number of years back is given in the following table :—

	Salaries and Wages.	Food.	Drugs and Disinfectants.	Other Items.	Total.
	£	£	£	£	£
1898–9	295	548	63	433	1339
1899–00	336	554	47	331	1268
1900–1	303	531	33	402	1269
1901–2	348	547	41	543	1479
1902–3	528	732	45	885	2060
1903–4	518	828	55	983	2384
1904–5	478	511	34	705	1728
1905–6	499	664	31	761	1955
1906–7	616	633	50	827	2126
1907–8	532	537	40	742	1851
1908–9	626	639	64	606	1935
1909–10	610	659	74	698	2041
1910–11	650	681	93	648	2072
1911–12	835	917	146	837	2735
1912–13	898	992	186	912	2988
1913–14	768	898	163	840	2669
1914–15	755	881	116	761	2513
1915–16	733	1005	99	858	2695
1916–17	610	1154	71	840	2675
1917–18	582	1251	58	708	2599
1918–19	723	1222	71	942	2958

TABLE IIIA.

BOROUGH OF CAMBRIDGE, 1919.

Table showing Causes of Death at Different Age Periods during the Year.

Persons.—(Males and Females.)

CAUSES OF DEATH.	AGES AT DEATH.														St. Andrew-the-Less.	St. Andrew-the-Great.	Chesterton.	Cambridge Without.
	All Ages.	Under 5 years.			5 to 10	10 to 15	15 to 20	20 to 25	25 to 35	35 to 45	45 to 55	55 to 65	65 to 75	75 and upwards.				
		0 to 1	1 to 2	2 to 5														
All Causes	646	44	9	14	15	5	15	15	32	38	55	102	116	186	368	97	135	46
I.—General Diseases.																		
Enteric Fever	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Typhus	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Relapsing Fever	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Malaria	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Smallpox { Vaccinated ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Smallpox { Not Vaccinated ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Smallpox { Doubtful	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Measles	3	2	...	...	1	...	...	...	...	...	...	...	...	...	2	1	...	...
Scarlet Fever	2	...	...	...	2	...	...	...	...	...	...	...	...	...	...	1	...	1
Whooping Cough	1	...	...	1	...	...	...	...	...	...	...	...	...	..	1	...	...	...
Diphtheria	8	1	...	1	6	...	...	...	...	...	...	...	...	...	6	...	2	...
Croup	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Influenza	33	...	...	1	...	2	2	3	9	2	2	4	6	2	16	7	7	3
Miliary Fever	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Asiatic Cholera	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Cholera Nostras	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Dysentery	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Plague	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Yellow Fever	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Leprosy	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Erysipelas	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Mumps	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
German Measles	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
General Diseases—continued.																		
Varicella	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Pyæmia Septicæmia	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Glanders	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Anthrax (Splenic Fever) ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Rabies	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Tetanus	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Mycoses	...	...	...	...	...	...	...	...	...	...	...	..	...	...	...	...	...	...
Pallagra	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Beri-beri	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Pulmonary Tuberculosis ...	34	...	...	...	...	1	1	5	9	10	4	4	...	...	25	2	7	...
Phthisis (not otherwise defined)	1	...	...	...	..	...	...	...	...	...	...	1	...	...	...	1	...	...
Acute Phthisis	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Tuberculous Meningitis ...	9	...	1	3	3	...	1	1	...	...	...	...	...	...	3	1	4	1
Tuberculous Peritonitis ...	4	...	1	1	...	...	...	1	1	...	...	...	...	...	3	...	1	...
Tabes Mesenterica	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Tuberculosis of Spinal Column	1	...	...	...	...	...	...	...	...	...	...	1	...	...	1	...	...	...
Tuberculosis of Joints... ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Tuberculosis of other organs...	1	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...
Lupus	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Scrofula	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Disseminated Tuberculos's ...	2	1	...	...	...	...	...	...	...	1	...	...	...	...	2	...	...	...
Rickets	...	...	...	...	...	...	...	..	...	...	...	...	...	...	...	...	...	...
Syphilis	2	2	...	...	...	...	...	...	...	...	...	...	...	...	2	...	...	...
Other Venereal Diseases ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Cancer of the Buccal Cavity ...	1	...	...	...	...	...	...	...	...	...	...	1	...	...	1	...	...	...
Cancer of Stomach, Liver, &c.	30	...	...	...	...	...	...	...	...	1	9	9	5	6	19	5	4	2
Cancer of Peritoneum, Intestines, and Rectum	15	...	...	...	...	...	...	...	1	...	2	2	6	4	7	3	3	2
Cancer of female genital organs	9	...	...	...	...	...	...	...	...	1	4	2	2	...	3	2	4	...
Cancer of Breast	9	...	...	...	...	...	...	...	...	...	2	3	2	2	4	3	1	1
Cancer of Skin	2	...	...	...	...	...	...	...	...	...	1	1	...	...	1	...	1	...
Cancer of other organs ...	13	...	...	...	...	...	1	...	...	2	3	3	2	2	8	2	2	1
Other Tumours	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Rheumatic Fever	4	...	...	...	...	...	2	...	...	...	...	...	1	1	1	...	3	...
Chronic Rheumatism	1	...	...	...	...	...	...	...	...	...	...	...	1	..	1	...	...	...
Osteo Arthritis	1	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	1
Gout	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Scurvy	...	...	...	...	...	..	...	...	...	...	...	...	...	...	...	...	...	...
Diabetes	10	...	...	...	...	...	...	...	1	2	...	3	1	3	8	1	...	1
Exophthalmic Goître	1	...	...	...	...	...	...	...	...	...	...	...	1	...	1	...	...	...

TABLE IIIA., 1919.—*Continued.*

CAUSES OF DEATH.	AGES AT DEATH. All Ages.	Under 5 Years. 0 to 1	1 to 2	2 to 5	5 to 10	10 to 15	15 to 20	20 to 25	25 to 35	35 to 45	45 to 55	55 to 65	65 to 75	75 and upwards.	St Andrew-the-Less.	St Andrew-the-Great.	Chesterton.	Cambridge Without.
General Diseases—continued.																		
Addison's Disease	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Leucocythæmia...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Anæmia Chlorosis	4	...	...	...	...	...	...	...	...	...	1	2	1	...	3	1	...	...
Other General Diseases ...	2	...	...	...	...	...	...	...	...	...	...	1	1	...	1	1	...	...
Alcoholism	2	...	...	...	...	...	...	...	...	...	1	...	1	...	1	1	...	...
Chronic Lead Poisoning ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Other Chronic Occupational Poisonings	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Other Chronic Poisonings ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	..	...	...	..
II.—Diseases of the Nervous System and of the Organs of Special Sense.																		
Encephalitis	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Cerebro-spinal Fever	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Meningitis	1	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Locomotor Ataxy	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...
Other Diseases of Spinal cord	5	...	...	...	...	...	1	1	...	...	1	...	1	...	2	...	...	...
Cerebral Hæmorrhage ...	27	...	...	...	...	...	...	1	...	1	3	3	7	12	17	3	5	2
Cerebral Apoplexy	1	...	...	...	...	...	...	...	...	...	...	...	1	...	...	1	...	...
Softening of Brain	3	...	...	...	...	...	...	...	...	...	...	1	1	1	1	...	2	...
Hemiplegia	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Paraplegia	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Other forms of Paralysis ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
General Paralysis of Insane ...	1	...	...	...	...	...	...	...	...	1	...	...	...	...	1	...	...	...
Other forms of Men : alienation	2	...	...	...	...	...	...	...	...	...	...	2	...	...	...	1	1	...
Epilepsy	2	...	...	...	...	...	...	...	...	...	...	...	...	2	2	...	...	...
Convulsions (5 years and over)	1	...	...	...	...	..	...	...	...	...	1	...	...	...	1	...	...	...
Infantile Con : (under 5 years)	2	2	...	...	...	...	...	...	...	...	...	...	...	...	2	...	...	...
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
Diseases of Nervous System, &c. —continued.																		
Chorea	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Hysteria, Neuralgia, Neuritis	1	...	...	...	...	...	...	...	...	...	...	...	1	...	...	1	...	...
Other Diseases of Nervous Syst:	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Cerebral Tumour	1	...	...	...	...	...	...	...	...	...	...	1	...	...	...	1	...	...
Diseases of the Eyes & Annexa	1	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	1	...
Mastoid Disease	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Other Diseases of Ears ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
III.—Diseases of the Circulatory System.																		
Pericarditis	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Acute Endocarditis	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Valvular Disease of Heart ...	51	...	...	...	...	...	...	...	2	6	2	13	19	9	28	8	12	3
Fatty Degeneration of Heart	1	...	...	...	...	...	...	...	...	...	...	1	...	...	1	...	...	...
Other Organic Dis. of Heart ...	19	...	...	...	...	...	...	...	...	...	...	5	5	9	8	5	5	1
Angina Pectoris	1	...	...	...	...	...	...	...	...	...	...	...	...	1	1	...	...	...
Aneurism	...	...	...	...	...	...	...	...	...	...	..	...	...	...	...	...	...	...
Arterio Sclerosis	11	...	...	...	...	...	...	...	...	...	...	1	...	10	5	1	5	...
Embolism & Thrombosis ...	8	...	...	...	...	...	...	...	...	...	...	1	2	5	7	1	...	...
Diseases of the Veins	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Status Lymphaticus	...	...	...	...	...	...	...	...	...	...	...	...	..	...	...	...	...	...
Other Dis. of Lymphatic Sys.	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Hæmorrhage	1	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1	...	...
Epistaxis	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Other Dis. of Circulatory Sys.	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
IV.—Diseases of the Respiratory System.																		
Diseases of the Nasal Fossæ ...	...	...	...	...	...	...	...	...	..	...	...	...	...	...	...	...	..	...
Diseases of Larynx	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Laryngitis	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Laryngismus Stridulus ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Other Diseases of Larynx ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Diseases of the Thyroid body	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Bronchitis	64	6	...	...	...	...	...	.	...	1	1	6	21	29	38	12	11	3
Broncho Pneumonia	17	3	3	4	...	...	...	...	...	...	...	2	...	5	6	3	7	1
Lobar Pneumonia	1	...	...	...	...	...	1	...	...	...	...	...	...	...	...	1	...	...
Pneumonia	16	1	...	1	1	...	...	...	2	3	1	2	2	3	11	1	4	...
Pleurisy	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...

TABLE IIIA., 1919.—*Continued.*

CAUSES OF DEATH.	AGES AT DEATH. All Ages.	Under 5 Years. 0 to 1	1 to 2	2 to 5	5 to 10	10 to 15	15 to 20	20 to 25	25 to 35	35 to 45	45 to 55	55 to 65	65 to 75	75 and upwards.	St. Andrew-the-Less	St. Andrew-the Great.	Chesterton.	Cambridge Without.
Diseases of the Respiratory System—continued.																		
Empyema	1	...	...	...	...	...	...	...	1	...	...	...	...	...	1	...	...	...
Pulmonary Congestion ...	3	...	...	...	...	...	...	...	...	1	...	...	1	1	2	...	1	...
Gangrene of Lung	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Asthma	1	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	1	...
Pulmonary Emphysema ...	1	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	1	...
Fibroid Disease of Lung ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Other Dis: of Respiratory Sys:	...	...	...	...	...	...	...	...	..	...	...	...	...	...	...	...	...	...
V.—Diseases of the Digestive System.																		
Diseases of Teeth and Gums ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Other Dis: of Mouth & Annexa	1	1	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...
Diseases of the Pharynx ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Tonsillitis	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Ludwig's Angina	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Diseases of Oesophagus ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Perforating Ulcer of Stomach	4	...	...	...	...	...	...	...	...	...	...	2	2	...	2	1	1	...
Inflamation of Stomach ...	1	1	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...
Other Diseases of Stomach ...	2	...	...	...	...	...	...	...	..	...	1	1	...	...	1	1	...	...
Infective Enteritis	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Diarrhœa	1	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1
Enteritis	3	1	2	...	...	...	...	...	...	...	...	...	...	...	1	1	...	1
Gastro Enteritis	2	2	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1	...
Dyspepsia, under 2 yrs. ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Colic	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Ulceration of Intestines ...	1	...	...	...	...	...	...	...	...	...	...	...	1	...	1	...	...	...
Duodenal Ulcer	1	...	...	...	...	...	...	...	...	1	...	...	...	...	1	...	...	...
Ankylostomiasis	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
Diseases of Digestive Sys :—con.																		
Other Intestinal Parasites ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Appendicitis	1	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	1	...
Hernia	3	1	...	...	...	...	...	...	...	...	...	...	1	1	3	...	...	...
Intestinal Obstruction ...	7	...	...	...	1	...	...	...	...	...	1	2	...	3	3	...	3	1
Other Diseases of Intestines ...	1	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	1
Acute Yellow Atrophy of Liver	...	...	...	...	...	...	...	...	...	..	...	...	...	...	...	...	...	...
Hydatid Disease of Liver ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Cirrhosis of Liver	3	...	...	...	...	...	...	...	...	...	2	...	1	...	...	1	2	...
Ot : Dis : of Liver&GallBladder	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Biliary Colic	2	...	...	...	...	...	...	...	...	...	...	1	1	...	1	...	...	1
Other Diseases of Liver ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Diseases of Spleen	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Peritonitis	1	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1	...	...
Other Dis : of Digestive System	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
VI.—Non-Venereal Diseases of the Genito-Urinary System and Annexa.																		
Acute Nephritis	5	...	...	1	...	...	1	...	...	1	...	1	...	1	4	1	...	...
Bright's Disease	19	...	...	...	1	...	...	...	2	1	1	4	6	4	12	1	3	3
Nephritis and Uræmia ...	6	...	...	...	...	...	...	...	1	2	1	...	1	1	5	...	1	...
Chyluria	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Other Diseases of Kidney ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Abscess of Kidney	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Cystic Disease	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	.	...	...
Suppression of Urine	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Culculi of Urinary Passages ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Diseases of Bladder	2	...	...	...	...	...	...	...	...	...	...	1	1	...	2	...	...	...
Diseases of the Urethra ...	1	...	...	...	...	...	...	...	...	...	...	...	1	...	1	...	...	...
Diseases of Prostate	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Non-Venereal Diseases of Male Genital Organs	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Uterine Hæmorrhage	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Uterine Tumour	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Other Diseases of Uterus ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Disorders of Menstruation ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Ovarian Cyst	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Ot: Dis : of Female Genital Or :	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Diseases of Ovary	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Non-puerperal Dis: of the Breast	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...

TABLE IIIA., 1919—*Continued.*

CAUSES OF DEATH.	AGES AT DEATH. All Ages.	Under 5 Years. 0 to 1	1 to 2	2 to 5	5 to 10	10 to 15	15 to 20	20 to 25	25 to 35	35 to 45	45 to 55	55 to 65	65 to 75	75 and upwards.	St Andrew-the-Less.	St Andrew-the-Great.	Chesterton.	Cambridge Without.
VII.—The Puerperal State.																		
Abortion	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Accident of Pregnancy ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Puerperal Hæmorrhage ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Other Accidents of Childbirth	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Puerperal Fever	1	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	1	...
Puerperal Albuminuria and Convulsions	1	...	...	...	...	...	...	...	1	...	...	...	...	...	...	1	...	...
Puerperal Phlegmasia... ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Puerperal Insanity	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Puerperal Dis. of the Breast...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
VIII.—Diseases of the Skin and of the Cellular Tissue.																		
Senile Gangrene	2	...	...	...	...	...	...	...	...	...	...	...	...	2	1	...	1	...
Gangrene of other types ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Carbuncle, Boil...	1	...	...	...	...	...	...	...	...	...	1	...	...	...	1	...	...	...
Phlegmon, Acute Abscess ...	2	...	...	...	...	...	...	...	...	...	1	...	...	1	2	...	...	...
Ulcer, Bedsores...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Eczema	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Pemphigus	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Ot. Dis. of Integumentary Sys.	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
IX.—Diseases of the Bones and of the Organs of Locomotion.																		
Diseases of the Bones	1	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	1	...
Diseases of the Joints... ...	1	...	...	...	...	1	...	...	...	...	...	...	...	...	1	...	...	...
Amputations	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Ot. Dis. of the Locomotor Sys.	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
X.—Malformations.																		
Congenital Hydrocephalus ...	1	1	...	...	...	...	...	...	...	...	...	..	...	...	...	...	1	...
Phimosis...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Congenital Malformation of Heart	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Ot. Congenital Malformations	3	3	...	...	...	...	...	...	...	...	...	...	...	...	3	...	...	...
XI.—Diseases of Early Infancy.																		
Premature Birth	10	10	...	...	...	...	...	...	...	...	...	...	...	...	9	1	...	...
Infantile Atrophy	4	4	...	...	...	...	...	...	...	...	...	...	...	...	3	1	...	...
Icterus Neonatorum	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	..	...	...
Sclerema and Œdema Neonatorum	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Want of Breast Milk	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Other diseases peculiar to Early Infancy	...	...	...	...	...	...	.	...	..	...	...	...	...	...	...	...	...	...
Diseases of Umbilicus, &c. ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Atelectasis	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Injuries at Birth	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Cyanosis Neonatorum	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Lack of Care	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
XII.—Old Age.																		
Senile Dementia	1	...	...	...	...	...	. .	...	...	...	...	...	...	1	...	1	...	...
Senile Decay	66	...	...	. .	...	...	...	...	...	...	...	...	5	61	38	6	12	10
XIII.—Affections produced by External Causes.																		
Suicide	11	...	...	...	...	...	...	1	...	1	2	7	...	...	4	2	4	1
Injury	17	...	1	1	...	1	3	2	1	3	3	1	...	1	7	4	3	3
Burns and Scalds	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Suffocation	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Drowning	3	...	...	...	...	...	1	...	...	...	1	...	...	1	2	1	...	...
Starvation	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Weather Agencies	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Gunshot Wounds	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Homicide	...	...	...	...	...	...	...	...	...	...	...	...	...	...	..	...	...	...
Execution	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Otherwise or not Stated ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...

TABLE IIIA., 1919.—*Continued.*

CAUSES OF DEATH.	Ages at Death.														St. Andrew-the-Less	St. Andrew-the Great.	Chesterton.	Cambridge Without.
	All Ages.	Under 5 Years.			5 to 10	10 to 15	15 to 20	20 to 25	25 to 35	35 to 45	45 to 55	55 to 65	65 to 75	75 and upwards.				
		0 to 1	1 to 2	2 to 5														
XIV.—Ill-defined Causes																		
Dropsy	1	...	...	...	...	...	...	...	...	...	1	...	...	...	1	...	...	...
Syncope (1 year & under 70)...	...	...	...	...	...	...	...	..	...	...	...	...	...	...	...	...	...	..
Heart failure (1 yr. & under 70)	1	...	...	...	...	...	...	...	...	...	1	...	...	...	1	...	...	...
Atrophy, Debility, Marasmus (1 year and under 70) ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Teething	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Pyrexia...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Other Ill-defined Deaths ...	1	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	1
Causes not specified	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...